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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,058	12/11/2003	Joseph B. Slater	KOS-13902/03	9169

7590

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EXAMINER

BOUTSIKARIS, LEONIDAS

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,058

Applicant(s)

SLATER ET AL.

Examiner

Leo Boutsikaris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-3, 6-8 and 11 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "506" cited in line 25, p. 3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because it contains more than 150 words and it compares the claimed invention with the prior art. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by the Admitted Prior Art.

Regarding claim 1, the Admitted Prior Art (Fig. 1) discloses a window assembly used for monitoring a process flow through the wall of a containment vessel, comprising a window 102 extending through and sealed to the wall of the containment vessel, the window 102 having an optical surface disposed in an optical path, along which a focal point is formed. It is noted that the language “[an optical surface]... associated with minimizing aberration, increasing numerical aperture, or both” amounts to functional language, and as such it is not given patentable weight. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). In addition, “[A]pparatus claims cover what a device *is*, not what a device *does*.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

Regarding claim 2, window 102 has a surface (right) facing into the process and a surface (left) facing away from the process flow.

Regarding claims 3, 7-8, the window assembly further includes a lens 104 disposed outside the containment vessel and in the optical path, and wherein the window 102 has a surface (right) facing into the process flow and a surface (left) facing the lens. Again, it is noted that the language “the window and lens cooperatively minimizing aberration, increasing numerical aperture, or both” cited in claim 7, is not given patentable weight as being functional in nature.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art in view of Arnold (US 3,578,407).

The Admitted Prior Art discloses all the limitations of the above claims except for specifying that the window is made from sapphire. Arnold discloses a window assembly used for observing process flow in high pressure reaction vessels, wherein the window 15 is made from sapphire (Fig. 3 and line 50, col. 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the window 102 disclosed in the Admitted Prior Art from sapphire, as taught by Arnold, since sapphire is a material with good tensile strength and is transparent in visible wavelengths.

Allowable Subject Matter

Claims 4-5, 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4-5, 9-10 are allowable over the prior art for at least the reason that even though the prior art discloses window assemblies used to observe the process flow in high pressure environments having a combination of a window and a lens, the prior art fails to teach or reasonably suggest, regarding claims 4, 9, a window assembly wherein the surface of the

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window facing the lens is substantially spherical, and regarding claims 5, 10, a window assembly wherein the lens and the window are such that light rays of the optical path are generally normal to the surface of the window facing the lens, as set forth by the claimed combination.

Greenleaf (US 3,788,730, Fig. 2, lines 3-18, col. 3) discloses a sight glass arrangement used to separate a protected environment such as a lens 12 from an environment 16 with high pressure such as deep sea water, comprising a housing 10, a window 44 which is disposed in the optical path, and facing away from the exterior environment, and a second window/lens 42, which is facing the water. Windows 42 and 44 are spherical or aspherical.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Leo Boutsikaris whose telephone number is 571-272-2308.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo Boutsikaris, Ph.D.
Patent Examiner, AU 2872
May 11, 2004

